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What We Know, What We Do and What We Could Do: Creating an Understanding of the Delivery of Health Education in Lower Secondary Government Schools in Western Australia

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Abstract: This paper focuses on the delivery of health education (HE) as a subject in lower secondary government schools in Western Australia (WA). It explores timetabling and staffing associated with HE and the issues arising from resourcing arrangements. This paper stems from of a study that investigated the prioritising of HE, which at that time, was timetabled as a separate, disciplined-based subject belonging to the Health and Physical Education (HPE) learning area. Insights from the study raise questions as to the qualifications of some teachers delivering HE and whether schools and universities in WA give HE the attention that it arguably requires if teachers are to effectively support young people's health. The paper presents challenges and recommendations for teacher education institutions in the light of data.

Introduction

Globally, in-school delivery of Health Education (HE) is heralded as making significant contributions to supporting and strengthening the health and wellbeing of children and young people (World Health Organization, 1997, 1999, 2003). Education in Australia is interwoven with teaching and learning designed to support health-enhancing dispositions – specifically, via educational outcomes focused on the development of health-related skills and more particularly, through learning outcomes identified with the Health and Physical Education (HPE) learning area (Australian Curriculum, Assessement and Reporting Authority [ACARA], 2015). Curriculum requirements reflect health data that highlights childhood as a significant time for young Australians to develop health and well-being issues (Australian Institute of Health and Welfare, 2008, 2011, 2012). HE is, therefore, important from both educational and health perspectives, with research identifying quantity and quality as criteria in order for it to effectively support development of health-enhancing behaviours (Centers for Disease Control and Prevention, 2013; Kirby et al., 1994; Nation et al., 2003; Ryan, Rossi, lisahunter, Macdonald, & McCuaig, 2012).

This paper reports on research that has critically examined the issue of quantity and quality of HE delivery in Western Australia (WA). It extends previous research in Australia conducted by Shilton, McBride, Cameron and Hall (1995) that collected data on the curriculum time allocated to Physical Education (PE) and HE in WA. Like other similar international studies (Kann, Brener, & Allensworth, 2001; Lohrmann, 2011; Mayer, Smith, & McDermott, 2011), while Shilton et al. noted issues with regard to the qualifications of the teachers delivering HE in the schools studied, they did not confirm the qualifications of the

teachers through data. This evidence gap was central to this study, particularly as further research (Beckett, 1990; Ridge et al., 2002; Ryan et al., 2012) and government declarations in Australia (Ministerial Council for Education, Employment, Training and Youth Affairs [MCEETYA], 2008) have recognised the significance of the teacher to enhance healthy citizenry.

The study reported in this paper was undertaken in 2012 and involved data collection from 75 teachers in lower secondary government schools in WA. At that time, lower secondary education consisted of the school years from year seven to year 10 with students ranging from 13 to 15 years of age. The study discusses the qualifications and training of teachers delivering HE, the curriculum time allocated to the HPE learning area and the importance of a motivation to teach HE in the delivery of skills-based participatory HE. This paper considers challenges presented by a situation while HPE seeks to support and strengthen healthy citizenry in young Western Australians. Significantly, 50 per cent of the teachers delivering HE in government lower secondary schools were neither qualified nor trained in the learning area. Additionally, this paper considers the inequity that existed in the learning time attributed to the subjects that represented HPE. Discussion considers issues of capacity associated with in-school delivery of HE and investigates how it might contribute to the health and wellbeing of young Western Australians when disjunction exists between *what we know*, *what we do* and *what we could do* with regard to delivery. Teacher education is identified as a critical site of influence in relation to the capacity of future teachers to deliver quality HE and to be informed advocates for greater allocation of time to the subject.

While the study was located in WA and a new HPE curriculum will be implemented in WA schools in 2017 (School Curriculum and Standards Authority, Western Australia [SCSAWA], 2015), the challenge of effective resourcing for HE remains current and relevant to supporting valuable learning experiences in HE. The empirical data shared and the issues addressed may be of benefit to stakeholders and other educational contexts across Australia and internationally.

Background

In preparing for this study, preliminary discussions were held with both primary and lower secondary teachers to assess their perceptions about the delivery of HE in WA schools. These discussions suggested an overwhelmingly negative perception of the quality and quantity of HE and highlighted variance in delivery as a significant concern. In accepting that contextual differences between schools may contribute to perceived variances in provision and that teachers ultimately choose how and what to enact in their pedagogic work (Tinning, 2014), this study acknowledged that this variance could also allow multi-dimensional understandings of health to develop, enabling students to make sense of themselves as healthy (Burrows & McCormack, 2012; Harris & Leggett, 2013). As the prevailing view in these discussions was that HE was falling short of recommended provision (Centers for Disease Control and Prevention, 2013; Kirby et al., 1994; Nation et al., 2003; Ryan et al., 2012; Shilton et al., 1995), this study sought to question the capacity of HE to support and strengthen healthy living amongst lower secondary students in WA schools. Additionally, it sought to respond to the calls for action by health advocates in WA (Daube, 2011; Dimitrijevich, 2011; O'Leary, 2011a, 2011b), who championed the efforts of HE to fortify the healthy development of young people, whilst criticising in-school delivery. Daube (2011) highlighted key gaps in knowledge that this study addressed; “nobody knows exactly what is going on, what is being taught, how much, how well or with how much training of teachers” (p. 18).

Understanding the WA Context of HPE

In the late 1990s, the introduction of education legislated in the *Curriculum Framework* allowed schools in WA to implement their representation of the HPE learning area (Western Australia Curriculum Council [WACC], 1998). As this framework was neither a curriculum nor a syllabus, it permitted schools flexibility in the interpretation, timetabling, shape and delivery of HPE by mandating the educational outcomes of the learning area and not the subjects through which HPE had been historically delivered in WA schools (i.e. PE and HE) (Shilton et al., 1995). In 2012 most government lower secondary schools, irrespective of the flexibility offered via the framework, delivered the HPE outcomes through the separate subjects of PE and HE, with Outdoor Education (OE) commonly offered as an elective subject (see Barwood, 2015). Continuation of this historical representation of HPE in WA occurred despite the mandate in the *Curriculum Framework* for HPE to be developed and delivered as integrated curriculum. Notably, this representation of HPE was used by some of the schools in this study to accommodate the *Curriculum and Assessment Reporting Policy,* otherwise known as the CAR policy (Western Australia Department of Education [WADOE], 2010). The CAR policy, which remains current for government schools in WA, legislates that government school students receive two hours of physical activity per school week within the school curriculum. Although this policy does not specify HPE as *physical activity,* some government schools see the curriculum time allocated to HPE – or more specifically, PE, as the natural place to enact the policy. The impact of the CAR policy in 2012 was significant to this research, as the findings of this study show that the three hours of learning time allocated to the HPE learning area in most WA government lower secondary schools was not equally distributed between PE and HE. Furthermore, this study found that the curriculum time allocated to HE had decreased since 1995, whilst curriculum time for PE had increased (Shilton et al., 1995).

Skills-based Participatory HE in Australia

The in-school delivery of HE in WA is characterised by skills-based participatory pedagogies where knowledge and understandings of what it means to be safer, healthier and more physically active are linked to skills that action these states (WACC, 1998; Western Australia Department of Education and Training [WADET], 2007a, 2007b, 2007c). This approach aims to support a holistic concept of health citizenry, by providing opportunities for students to explore different ways of knowing health knowledge to develop behaviours that support lifelong health (WACC, 1998; WADET, 2007a, 2007b, 2007c). Churchill et al. (2011) suggest that teachers work to support the learning diversity of students through the pedagogical decisions they make and that pedagogical choices and pedagogical actions define who teachers are as a professionals. At the time of this study, skills-based participatory pedagogies were supported through the outcomes of HPE legislated in the *Curriculum Framework* (WACC, 1998) and more specifically through pedagogical guidance articulated in the *K-10 Syllabus for HPE* (WADET, 2007a, 2007b, 2007c).

From a more current and national perspective, skills-based participatory HPE is supported in Australia through the endorsement of the Australian Curriculum for Health and Physical Education (AC: HPE) (ACARA, 2015). This three-dimensional curriculum, articulating learning areas, general capabilities and cross-curricular priorities is nationally endorsed but responsibility for interpretation and implementation lies with the States and Territories. In relation to HPE, the AC: HPE maintains the potential for an integrated curriculum, while simultaneously articulating two strands that may readily be seen as

associated respectively with PE and HE (see Penney, 2013; ACARA, 2015). The content and achievement standards are scoped into two year bands.

In 2015, curriculum from the AC: HPE's two strands; movement and physical activity (MPA) and personal, social and community health (PSCH), was translated by SCSAWA as *curriculum for the subjects of PE and HE*. SCSAWA, in re-contextualising the AC: HPE to suit the needs of WA schools, re-scoped and sequenced (for each year of schooling) this curriculum into the *WA P-10 Syllabus for HPE* (SCSAWA, 2015). Implementation of this WA version is planned for 2017 and in keeping with the experiential focus and dimensionality of its originator; the AC: HPE, promotes skills (health inquiry, health literacy, and movement skills) as the base for students in WA to lead healthy, safe and physically active lives.

Whilst the AC: HPE does not explicitly offer pedagogical advice to teachers, the discursive processes of the *K-10 Syllabus for HPE* specifically directs WA teachers to apply skills-based pedagogies to learning contexts that are related to health, with knowledge to be considered as an accompaniment to the learning of skills (WADET, 2007a, 2007b, 2007c). This directive distinguishes skills-based pedagogies from other pedagogies that may focus on the didactic transmission of health knowledge. It recognises that applying attitudes, values and emotions to the learning process can help to better equip young people to make socially responsible decisions (Cowley, David, & Williams, 1981; Lee, 1981; Meeks, Heit, & Page, 2007; St Leger & Young, 2009; Tang et al., 2008; Wharton, Ng, & Daly, 2007; World Health Organization, 2003). The distinction and approach can be seen as aligning with the prompt that the AC: HPE rationale provides, to foreground critical inquiry and health literacy in teaching and learning (ACARA, 2015; Alfrey & Brown, 2013; Leahy O'Flynn & Wright, 2013). Notably, advocates of skills-based pedagogies in the teaching and learning of HE merit this approach as allowing opportunities for young people to critically engage with health knowledge (Allensworth, 1993; Broadbear & Keyser, 2000; Meeks et al., 2007), and refer to skills like reasoning, decision-making, problem solving, and refusal and reflection as necessary for the betterment of own and others' health. Additionally, these advocates stress that the potential for this approach to promote protective factors lies with the provision of appropriate learning experiences, as these experiences prompt students to connect with the health information as a means to uncover their own social health norms. Advocates of this approach also argue that teaching and learning devoid of such skills does not effect behaviour change (Beckett, 2006; Black, Furney, Graf, & Nolte, 2010; Kolbe L, 2005; McCuaig, 2006b).

Globally, scholars have raised concerns that in-school delivery of HE that lacks opportunities to develop skills, presents largely reactive, rather than proactive and/or preventive education (Begoray, Wharf-Higgins, & MacDonald, 2009; Fetro, 2010; Lynagh, Gilligan, & Handley, 2010; Mayer, Smith & McDermott, 2011; McBride, Cameron, Midford, & James, 1995; Peterson, Cooper, & Laird, 2001; Rowling, Booth, & Nutbeam, 1998). Teacher education is identified as crucial to advance a preventive health approach. Sinkinson and Burrows (2011) identify teacher training as critical to ensure understandings and/or views of health are conveyed in appropriate ways, believing that health information, which primarily focuses on answering the 'what' and 'why' questions in health, can sometimes lead to understandings that are unrelated and/or irrelevant to the student. Sinkinson and Burrows (2011) stress that at worst, a didactic and disconnected delivery of health information can sometimes lie beyond the social maturity of the child and they encourage teachers, through their pedagogical choices, to "dissect, disrupt and perhaps transform student thinking about what constitutes and contributes to well-being and health" (p. 203). Other commentators, such as Kirk and Gray (1990) and more recently Cahill et al. (2014), agree with this perspective and highlight that HE teaching that is devoid of opportunities to develop health

skills, reduces the possibilities to promote health-enhancing dispositions. Collectively these scholars uphold the training of teachers as critical to supporting a skills-based delivery of HE.

Australia-wide, the inadequacy of teacher training in preparing schools for HPE delivery remains a contentious issue (Australian Council for Health, Physical Education and Recreation [ACHPER], 2014; Macdonald & Glover, 1997; McCuaig, Coore, & Hay, 2012; Rowling et al., 1998; Tinning, 2004), with one WA report imploring the Minister of Education in WA to scrutinise the State's universities undergraduate and postgraduate teacher training curriculum (Western Australia Education and Health Standing Committee, 2011). This report acknowledged the negative perceptions of the pedagogical knowledge encompassed in HPE teacher training in WA, which according to research conducted elsewhere in Australia (Swabey, Castelton and Penney, 2010) remains a key concern for beginning teachers. In examining the course offerings of the four universities that prepare HPE learning area teachers in WA, this study found that one university allowed students, through unit selection, to omit essential learnings of the HPE learning area from their course structure (Edith Cowan University, 2012; Murdoch University, 2012; The University of Notre Dame Australia, 2012; The University of Western Australia, 2012). In so doing, these students developed a limited perspective of HPE, which privileged PE and/or OE over HE. Notably, those aspects omitted related to HE pedagogy and HE content knowledge (for more information see Barwood, 2015).

Australian Teachers in Australian Schools

In 2009, the Australian Government in support of the *Melbourne Declaration on Education Goals for Young Australians* (MCEETYA, 2008) committed to improving teacher quality in Australian schools with work commencing on the establishment of professional standards for teachers (Australian Institute for Teaching and School Leadership [AITSL], 2011b). Recognising that world-class education is dependent on the quality of the teachers delivering education in schools, the standards aimed to define what Australian teachers should know and do. AITSL identified teacher quality as "the single most important in-school factor influencing student achievement" (p. 1) and in 2010, endorsed the standards as a public statement of educational reform aimed to promote equity and excellence in Australian schools (AITSL, 2011b).

In defining the pedagogic work of teachers within the seven standards (see Table 1), AITSL identified three domains of teaching: professional knowledge, professional practice, and professional engagement (AITSL, 2011b). Standard one refers to teachers knowing their students and understanding how they learn. Standard two refers to teachers knowing the content and how to teach it. Standard three refers to the ways in which teachers plan for and implement effective teaching and learning. In 2012 the application of these three standards, in the context of the delivery of HE in lower secondary government schools, was dependent on the teachers delivering a skills-based perspective (WACC, 1998; WADET, 2007a). More specifically, it was dependent on the teachers knowing the HPE curriculum, understanding the significance of the pedagogical guidance articulated in the syllabus and utilising skills-based participatory pedagogies in their practise to support and strengthen health-enhancing dispositions in young Western Australians.

Drawing on the AITSL standards for Australian teachers (2011b), the findings of earlier WA research (Shilton et al., 1995), and the examination of university course offerings for HPE learning area teachers in WA (Barwood, 2015), this study sought to address the gap in literature pertaining to the qualifications and preparation of teachers delivering HE in WA schools. More pertinently, it sought to explore the ways in which WA universities and

government schools supported or interrupted the informed delivery of HE in the classroom.

Domains of teaching	Standards
Professional Knowledge	1. Know students and how they learn 2. Know the content and how to teach it 3. Plan for and implement effective teaching and learning
Professional Practice	4. Create and maintain supportive and safe learning environments 5. Assess, provide feedback and report on student learning
Professional Engagement	6. Engage in professional learning 7. Engage professionally with colleagues, parents/carers and the community

Table 1: Organisation of the Australian Professional Standards for Teachers (AITSL, 2011b, p 5)

Research Methodology and Study Design

This study was underpinned by a postpositive theoretical perspective to account for varying views by teachers about the reality of HE in WA schools. Phillips and Burbules (2000), explain that postpositive researchers do not accept that humans are able to apply a detached view to reality do accept that through human behaviour multiple realities exist. The lead author for this study accepted that meanings, understandings and/or perceptions of the research context, other than her own were relevant to the field of research and like Tashakkori and Teddlie (2003), valued broader fields of understandings to arise from the research data. Since the lead author had a career immersed in the delivery of HE in WA schools, she believed that postpositive research could account for the multiple discussions operating within this context. Additionally, she viewed this perspective as appropriate to address the broad scope of the research.

To support this theoretical perspective, the lead author utilised mixed methods methodology, collecting quantitative data from 75 teachers delivering HE in 49 different government schools providing lower secondary education through an online and paper survey. Following this, it collected qualitative data from nine teachers who participated in semi-structured interviews. Mixed methods methodology was selected as it offered attractive possibilities to offset the lead author's assumptions about the research context and the duality of the research methods could strengthen the research (Creswell & Plano Clark, 2011; Creswell, Plano Clark, Gutmann, & Hanson, 2003). The study design is summarised in Table 2.

Research Method and Data Collection	Data Collection Timeline
Quantitative Data	
• Qualtrics – online survey (n=14)	November – March 2012
• ACHPER: WA State Conference – paper survey (n=7)	November – December 2011
• Qualtrics – online survey (n=13)	November 2011
• Australia Post – paper survey (n=22)	February – May 2012
• School Drug Education and Road Awareness (SDERA): Keys for Life Conference – paper survey (n=19)	February – May 2012 March 2012
Qualitative Data	
• Semi-structured interviews with teachers (n=9)	December 2011

Table 2: Overview of Study Design and Data Collection

Before commencing data collection, ethics approval was obtained from Edith Cowan University and the Western Australian Department of Education (WADOE), with all participants providing informed consent. The participants were identified using a

convenience sample, available through the WADOE website (Punch, 2004) and more particularly, through the WADOE Schools Online website.

Quantitative data was collected via three ways to provide descriptive numerical data of the WA setting. This included data obtained via Qualtrics online format, and in paper format through Australia post and at two HPE teachers' conferences held in WA (ACHPER and SDERA conferences). The sample size (75) for quantitative data was compared to the population size of HPE teachers in WA at that time (E. Goh, personal communication, July 23, 2012) and two other similar studies to compare favourably (ACARA, 2012; Smith et al., 2011). Qualitative data was collected via semi-structured interviews with nine teachers to provide contextualised information of the WA setting (Lincoln & Guba, 1985). The nine participants came from lower secondary government schools across WA and offered themselves as interviewees after the first round of quantitative data collection. As a collective and at the time of analysis, the nine interviews were deemed to be trustworthy representations of teachers delivering HE in WA lower secondary schools due to shared characteristics (Creswell, 2013; Erlandson, Harris, Skipper, & Allen, 1993; Lincoln & Guba, 1985). The nine participants repeated similar opinions and concerns regarding the research context, and were united in two main concerns: the use of out-of-field teachers to deliver HE and the perception that unqualified and/or untrained teachers were often used to deliver the subject. At the point of analysis, theoretical saturation was deemed to have occurred with the uncovering of new knowledge unlikely in further interviews (Creswell, 2013).

Analysis of the quantitative data was performed using SPSS (21) and summarised using simple frequency distributions, percentages and tables and graphs. Central tendency and variations of scores were summarised using means and standard deviation. Artichoke computer software (Fetherston, 2011) was used to code the qualitative interview data through a systematic, exhaustive and iterative process. This program was selected in preference to the capabilities of QSR International's NVivo 10 software for analysing video data because Artichoke was specifically designed for educational purposes. Additionally, the program's creator aided in this study and his availability, knowledge and experiences outweighed the benefits of using other software.

Analysis of quantitative data determined the extent to which 49 lower secondary government schools in WA timetabled HE as a separate subject, specifically identifying the curriculum time allocated to HE and the teachers timetabled to deliver the subject. Analysis of qualitative data revealed the perspectives of a group of HE teachers and was combined with the quantitative data to produce contextual insight into the representation and delivery of HE in particular WA schools.

Discussion of Findings

As indicated earlier in this paper, the study considers that there is a gap between *what we know*, *what we do* and *what we could do* regarding the representation of HE in lower secondary government schools in WA. More specifically, in reviewing the literature and the capacity of the curriculum to promote healthy citizenry, the study found disjunction between knowledge and practice. Discussion here addresses three main insights that arose from the research data. These insights are most pertinent to responding to the challenges faced by schools and universities to support and strengthen the health and wellbeing of young Western Australians. In brief and in order of priority, these insights relate to:

1. Inequity in the division of curriculum time allocated to PE and HE as a representation of the HPE learning area in WA;
2. Inconsistencies in the qualifications and training of the teachers delivering HE; and

3. Motivation to teach HE and to engage with skills-based participatory HE.

Insight One: Curriculum Capacity to Effect Healthy Citizenry

The study found that the curriculum time attributed to HE as a separate subject in the government schools studied has declined since 1987, compared to a growth in curriculum time for PE (see Figure 1). Additionally, it found variance in the HE curriculum time across schools, but for most schools HE was delivered for approximately one hour per timetable cycle. The participants referred this hour as "the 25th period" because it was the last hour available within a timetable that contained 25 periods. This represented only one third of the available three hours of HPE curriculum time and was without a governing policy. This finding contributes new contextual insight – firstly into the issues of contested curriculum time associated with the integration of the HPE learning area in Australia (Harrison & Leahy, 2006), and secondly, into the policies and practices in some WA schools, both of which risk undermining HPE's capacity to effect healthy citizenry.

Figure 1 demonstrates that 'integration' of HPE in WA has been a union that promotes PE over HE, further validating Tinning (2004), who explored the tension between PE and HE within the structure of an integrated HPE. This insight highlights the probability of inequity and bias in the representation of HE in the HPE curriculum content and exposes a contravention of the explicit goal of equity and excellence in the delivery of HPE, as outlined in the Melbourne Declaration on Educational Goals for Young Australians (MCEETYA, 2008).

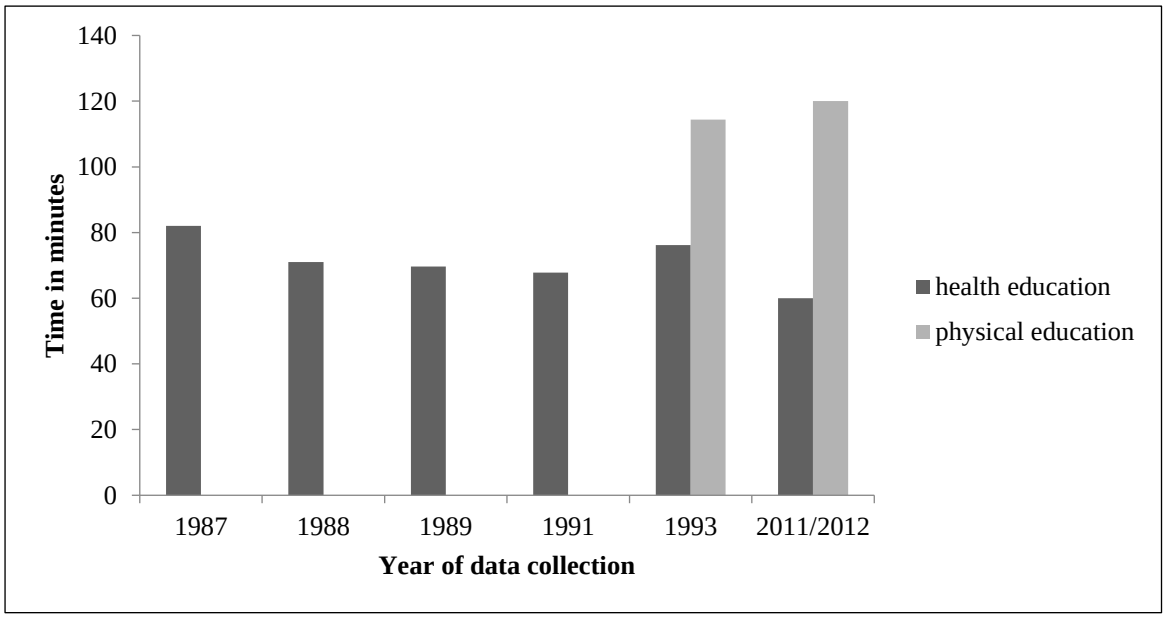

Figure 1: Average time per week allocated to HE and PE in lower secondary government schools in WA, 1987–2011/12 (adapted from Shilton et al., 1995, p. 25)

Insight Two: Idiosyncratic Delivery

This study found evidence of idiosyncratic delivery of HE in lower secondary government schools in WA, identifying four combinations of teacher qualifications and training distinctive to the teachers timetabled to deliver the subject. Crucially, this insight provides criteria to evaluate the deployment of teachers to HE and places into perspective the

extent to which unqualified and untrained teachers were delivering the subject in WA in 2012. One participant captured the view of the other participants when she referred to the diversity of the delivery as a "bugbear of the WA system."

The first type of teacher (53.3%) found to be delivering HE in the schools studied was a qualified HPE teacher, trained in HE pedagogy. The second type of teacher (25.3%) was a qualified HPE teacher who completed a degree devoid of specific HE pedagogical training. For example, this type of teacher may have gained a degree in sports science or similar, then completed further study to qualify as a teacher. However, at worst this teacher was a qualified HPE learning area teacher who had not studied HE pedagogy as a compulsory component of the qualification. Significantly, one third of the qualified HPE teachers were type two teacher of HE. The third type of HE teacher (4%) was considered to be unqualified in HPE but trained in HE pedagogy. For example, this teacher may have completed a degree in the preparation of food and technology and, as a component of that degree, be trained in health-related pedagogy. Finally, the last type of teacher (17.3%) timetabled to deliver HE was unqualified in HPE and untrained in the pedagogy of HE.

This idiosyncratic delivery brings into question the achievement of the AITSL's standards and contradicts the Australian Government's quest for quality teaching. Additionally, because schools and universities have a specific "responsibility to work together to support high-quality teaching and school leadership" (MCEETYA, 2008, p. 11) such inconsistency between the teachers delivering HE could suggest organisational ambivalence with potential to undermine the promotion of equity and excellence in educational outcomes for all young Australians. This insight confirms a link between the timetabled delivery of HE in WA schools and perceived inadequacies in some university courses that prepare HPE teacher(s). This insight also exposes the organisational ambivalence functioning in government schools in WA to support healthy citizenry (McBride et al., 1995).

Insight Three: An Ideal Delivery

Irrespective of the qualifications and training of the teachers who participated in the study, the participants viewed an ideal delivery of HE as being made by qualified and trained teachers of HPE (type one), who possess the motivation to teach the subject, and who use skills-based participatory pedagogy. Additionally, they consistently reported incidences of type two, type three and type four teachers ignoring skills-based pedagogy when delivering HE and more significantly, refusing to teach the subject's important but controversial content. One participant complained that she had provided a teacher of this type; who delivered HE at her school, with all the lesson plans he needed but that he still refused to teach the subject's essential content. This insight is consistent with the literature examined, which raised concerns about unqualified and untrained teachers delivering HE, however, it suggests that motivations to teach HE could be more significant in this research context.

The literature argued that untrained and/or unqualified teachers delivering HE often deviate from a preferred approach to incorrectly or poorly represent the content (Fetro, 2010; Paakkari, Tynjala, & Kannas, 2010; Peterson et al., 2001). The participants in this study reported type two, type three and type four teachers ignoring the pedagogical guidance of the HPE LA's curriculum documents and overlooking a skills-based approach in favour of a didactic delivery of health facts. One participant reported this as a case of these teachers saying to students in HE: "shut up, sit down and do a worksheet." As a whole, the participants believed that these types of teachers felt more comfortable with a didactic delivery even though research stipulates that the delivery of facts and health information on its own is not enough to effect behavioural change (Beckett, 2006; Black et al., 2010; Kirby

et al., 1994; Kolbe L, 2005; McCuaig, 2006a).

Irrespective of the prevailing view amongst the participants, the study found that a skills-based participatory pedagogical approach was the preferred option for 99 per cent of the study's participants, with 84 per cent of them stating that they often used a skills-based participatory pedagogical approach to deliver HE. Furthermore, the majority of the participants stated that they enjoyed delivering HE and considered themselves satisfied, competent and confident HE teachers.

Rather than contradicting Insight Two, Insight Three demonstrates the critical importance of the two insights by suggesting that in the context studied, teacher motivation was even more significant to the delivery of HE than qualifications and training because all of the untrained teachers reported that they were delivering a skills-based approach to HE. This further suggests that teacher enjoyment affects the delivery of a skills-based participatory pedagogical approach in the classroom. Collectively these insights suggest that the overarching requirement needed for successful teaching of HE is enjoyment, competence and confidence, however, this combination needs to be explored further so that its significance can be learnt, understood and a better representation of HE evolve. At this point, it is important to acknowledge that this study was unable to verify the claims made by the participants that some teachers who were delivering HE were ignoring skills-based pedagogy and refusing to teach aspects of the subject's content, as teacher observation of classroom practice was not permitted.

Moving Forward, Suggestions and Considerations for Innovation

This study found that in many instances the preparation for teachers delivering HE in lower secondary government schools in WA could be significantly improved. To counteract the mismatch between *what we know, what we do* and *what we could do* with regard to the delivery of HE in these schools, this study generated four suggestions to support effective resourcing arrangements. It generated two considerations for universities to promote quality HPE and for all schools to be high performing. Taken together, the suggestions and considerations signify the action that arguably needs to be taken in WA in order to:

- recognise the context and administrative demands on HPE teachers who work in government schools;
- embrace the AITSL standards for teachers to support health-enhancing dispositions in young people; and
- support the MCEETYA's educational goal for young Australians to become active and informed citizens.

Suggestions for Schools

The four suggestions for schools aim to ensure the potential of HPE to support a safer, healthier and more active citizenry.

- Timetable teachers who want to deliver HE to HE classes, so that teachers who feel confident, comfortable and enjoy delivering the subject's content will teach this essential information.
- Using professional learning and development, adequately prepare HPE LA teachers who want to deliver HE, and who are untrained in HE pedagogies.
- Using professional learning and development, adequately prepare non-HPE LA teachers who want to deliver HE, and who are untrained in HE pedagogies.

- Give equal status within HPE to HE and PE through equal allocation of curriculum time.

Considerations for Universities

The two considerations for the universities in WA that prepare pre-service teachers aim to ensure that pre-service teachers understand the significance of skills-based participatory HE and its contributions to developing healthy citizenry.

- Appropriately prepare pre-service HPE teachers with all mandatory aspects of the legislated WA curriculum.
- Appropriately prepare pre-service non-HPE secondary teachers to deliver HE.

Conclusion

This paper acknowledges the study in 2012 as just a beginning and considers observations of the delivery of HE in the classrooms of the teachers studied as the next step to uncover the extent and effect of the findings of the research on student learning. Accordingly, the authors advocate further research to position schools as a key site to support health-enhancing action in young people and more particularly, to position the HPE learning area as a health-strengthening resource with the capacity to effect safer, healthier and more physically active young people. In spite of the limitations, the findings from this study respond to the call of Daube (2011), suggesting that the policies, practices and procedures in some universities and government schools in WA interrupt the informed delivery of HE in the classroom. In turn, this suggestion supports the view that, in terms of quantity and quality, HE in the schools studied is falling short of what is recommended (Centers for Disease Control and Prevention, 2013; Kirby et al., 1994; Nation et al., 2003; Ryan et al., 2012; Shilton et al., 1995).

Notably, this study confirms through data, unsubstantiated claims from past research to identify an idiosyncratic workforce of teachers delivering HE in WA. More particularly, it identified four different types of teacher delivering HE. Thus, to ensure that all young people receive quality HE as defined by AITSL, this study encourages all schools in WA to realise the potential afforded through the HPE curriculum space to effect healthy citizenry by timetabling. Additionally, it reminds all universities in WA of their responsibility to support high-quality teaching (AITSL, 2011a), considering the adequate preparation of beginning HPE learning area teachers with subject content and pedagogy (AITSL, 2011b) and multi-disciplinary HPE knowledge (ACARA, 2015) as the best means to support HPE to effect safer, healthier and more active young people. It is apparent from the findings of this study that a cohesive nexus between *what we know and what we actually do* is necessary in lower secondary government schools in WA, if HE is to play a role in supporting and strengthening the health of young Western Australians. The new curriculum requirements for HPE now established in WA reaffirm the need to invest in resourcing and curriculum development work in schools and teacher education institutions that will enable the potential of the learning area to be realised.

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